Amendments to the specification:

Page 1, lines 1 and 2, delete the entire title in lines 1 and 2.

Page 1, lines 1 and 2, add the following new title:

A HIGH LINEAR DENSITY READ HEAD WITH A CONTIGUOUS JUNCTION AND MINIMAL SHIELD SHORTS

Replace the paragraph beginning at page 8, line 13 and ending at page 8, line 21, with the following replacement paragraph:

First and second read gap material layers 150 and 152 have first and second depressions 160 and 162 which extend laterally from the first and second side walls 138 and 139 and nonmagnetic electrically insulative first and second refill gap layers 164 and 166 which are disposed in the first and second depressions. A suitable material for the first gap layer 76, the first and second read gap material layers 150 and 152 and the first and second refill gap layers 164 and 166 is aluminum oxide (Al_2O_3). The first refill gap layers 164 and 166 are not located on a portion of the first and second side walls 138 and 139 so that the first and second hard bias and lead layers 134 and 136 make direct electrical contact with the sensor 74.

Replace the paragraph beginning at page 9, line 25 and ending at page 10, line 7 with the following replacement paragraph:

In Fig. 15, a seed layer for texture purposes (not shown), the first and second hard bias layers 140 and 144, the first and second lead layers 142 and 146 and a carbon layer 174 may be sputter deposited on the first and second refill layers 164 and 166 and on the first and second side walls 138 and 139. In Fig. 16 chemical mechanical polishing (CMP) has removed the top portion of the carbon layer 174 above photo mask 200, vertical portions of the layers 174, 146 and 144, the photo mask 200 and is stopped by the carbon layer 172, and then reactive ion etching (RIE) removes ~~the carbon layer 174 on top of the first and second leads 142 and 146 and~~ the carbon layer 172 on top of the sensor 74. The result is a contiguous junction between the first and second side walls 138 and 139 and the first and second hard bias and lead layers 134 and 136 with a good electrical connection therebetween. The second read gap layer 78 and the second shield layer 82 are then formed, as